PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL LOCATED AT THE INTERSECTION OF MD 2 AND THE M.V.A. ENTRANCE. MD 2 (GOV. RITCHIE HIGHWAY) IS ASSUMED TO RUN IN THE NORTH/SOUTH DIRECTION IN ANNE ARUNDEL COUNTY.

THIS MODIFICATION INCLUDES THE FOLLOWING: INSTALL AUDIBLE TACTILE PUSHBUTTON STATION, PEDESTRIAN EDUCATION SIGNS, SIGNS AND PEDESTAL POLES AT THE INTERSECTION OF MD 2 AND THE M.V.A. ENTRANCE ALL SIGNAL HEADS WILL BE UPGRADED TO LED AND VIDEO DETECTION WILL BE INSTALLED FOR THE SOUTHBOUND AND WESTBOUND APPROACHES.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA FIVE PHASE, FULLY ACTUATED MODE. THE THROUGH MOVEMENTS ALONG MD 2 OPERATE CONCURRENTLY WITH AN EXCLUSIVE LEFT TURN PHASE FOR THE SOUTHBOUND MOVEMENT OF MD 2. THE SIDE STREET WILL OPERATE AS A SIDE STREET SPLIT WITH A COUNTDOWN PEDESTRIAN SIGNALS AN A ALTERNATE AUDIBLE PEDESTRIAN MOVEMENTS WILL BE UPGRADED ON THE NORTH LEG OF THE INTERSECTION.

EQUIPMENT LIST

EQUIPMENT TO BE SUPPLIED BY THE STATE OF MARYLAND.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9571	13	SF	[UPDATED] SHEET ALUMINUM FOR POLE MOUNTED SIGN
	2	EA ,	R10-4(1) PEDSETRIAN EDUCATION SIGN TO READ "PUSH BUTTON TO CROSS RITCHIE HWY."
	1	EA	M6-2(L) 21"×15"
	1	EA	W11A-2 36"x36"
9570	28	SF	[UPDATED] SHEET ALUMINUM FOR GROUND MOUNTED SIGN
	1	EA	W11A-2 36"x36
	2	EA	W11A-2 30"x30"
	2 .	EA	M6-2(R) 21"×15"
	1	EA	M6-2(L) 21"x15"
1 9086	1. 1	EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

		ITEM NO.	(QUANTITY	UNIT		DESCRIPTION					
		1001		1	EA		MAINTENANCE OF TRAFFIC PER ASSIGNMENT					
		2001		3	CY		CLASS 2 EXCAVATION					
		5003		510	LF		12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS					
		5005		510	LF	ŧ	REMOVAL OF EXISTIGN PERMANENT PAVEMENT LINE					
		6001		8	L.F		STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH					
		6002		8	SF		4 INCH CONCRETE SIDEWALK					
		8001	2 30	×	EΑ		12 INCH - R. Y. G - LED SIGNAL HEAD SECTION					
		8003	***************************************	(1	EΑ		2 WIRE CENTRAL CONTROL UNIT					
		8007	*	3	EA		8 INCH LED SIGNAL - R, Y, G - HEAD SECTION					
		8010		2	EA		AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS					
		8011		1	EA		BREAKAWAY PEDESTAL POLE - ANY SIZE					
		8017		1			REMOVE AND DISPOSE OF EQUIPMENT PER ASSIGNMENT					
		8024		65	LF		UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED					
		8026		25	LF		UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED					
		8033		210	LF		NO 6 AWG STRANDED BARE COPPER GROUND WIRE					
,	2	8036-		-5	<u>L</u> F		1 INCH LIQUID TICHT FLEXIBLE NON METALLIC CONDUIT FOR DETECTOR SLEEVE					
		8045		28	SF	· · · · · · · · · · · · · · · · · · ·	INSTALL GROUND MOUNTED SIGN					
		8046		13	SF	3	INSTALL OVERHEAD SIGN					
		8052		1	EΑ	* * * * * * * * * * * * * * * * * * * *	GROUND ROD + 3/4 INCH DIAMETER X 10 FOOT LENGTH					
	2 -	8057		80			- ELECTRICAL CABLE 2 CONDUCTOR: ALUMINUM SHIELDED					
[2]-	[2]	8058	,	210	LF		ELECTRICAL CABLE - 2 CONDUCTOR, NO 14 AWG					
		8061	* **	300	LF		ELECTRICAL CABLE - 7 CONDUCTOR NO 14 AWG					
	ــاڪا	8062		400	—— <u>L</u> F—		<u>-LOOP WIRE ENCASED IN FLEXIBLE TUBING NO 14 AWG</u>					
		8063		110	—— <u>L</u> F——		-SAW-CUT-FOR SIGNALLOOP-DETECTOR-					
*	1	8047	2 2	\mathbf{x}	EΑ		VIDEO DETECTION CAMERA AND CABLE UP TO 500 FEET					
	2	8002		1	EA	•	15 FOOT LIGHTING ARM					

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PROJECT CONTACTS

THE CONTACT PERSONS ARE AS FOLLOWS:

MRS. KIMBERLY TRAN DISTRICT ENGINEER-TRAFFIC PHONE: 410-841-1003

MR. ANDRE FUTREL ASSISTANT DISTRICT ENGINEER-MAINTENANCE PHONE: 410-841-1002

MR. ED RODENHIZER CHIEF, SIGNAL OPERATION SECTION PHONE: 410-787-7652

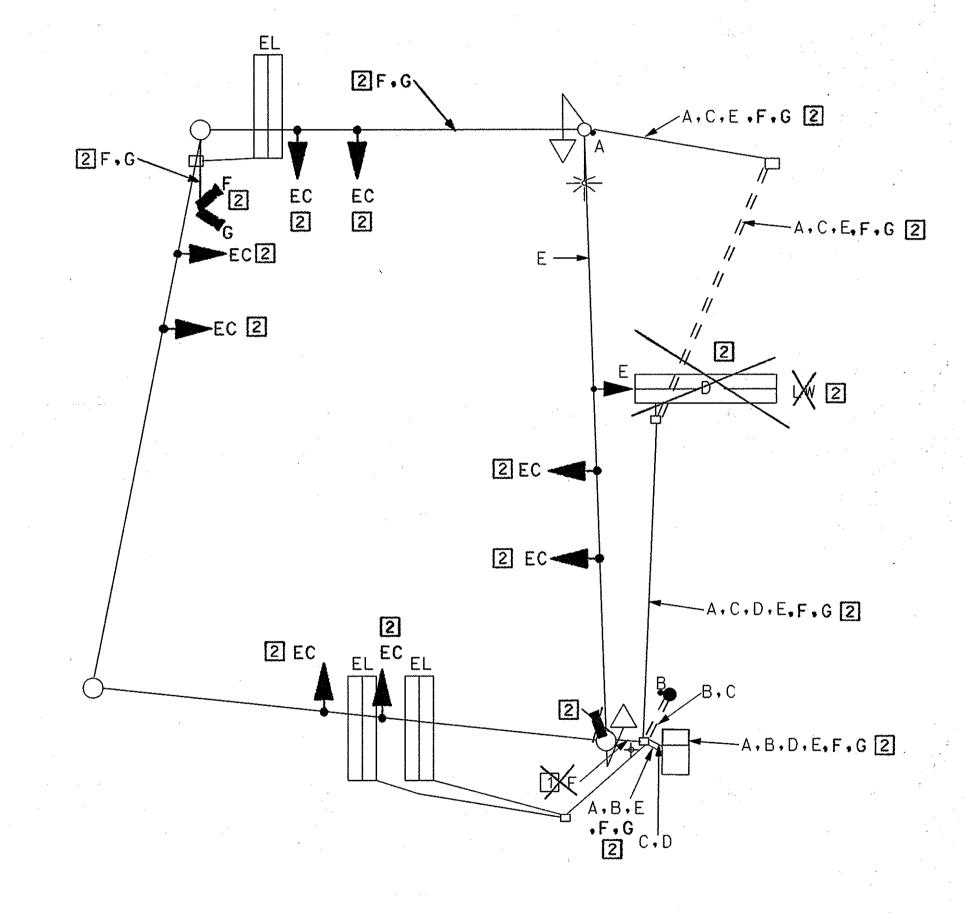
MR. JOHN S. MAYS DISTRICT UTILITY ENGINEER PHONE: 410-841-1005

MR. RICHARD L. DAFF, SR. CHIEF, TRAFFIC OPERATION DIVISION PHONE: 410-787-7630

MR. ROBERT SNYDER ASST. CHIEF, TRAFFIC OPERATION DIVISION PHONE: 410-787-7631

PHASE CHART

PHASE 2 AND 5	R	R	G ∢G	ფ	G	R	R	R	R	DW	DW	<u> </u>
5 CHANGE	Ŕ	·R	G ∢Y-	G ¥	G	R	R	R	R	DW	DW	√
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	DW	DW	4 4
2 AND 6 CHANGE	Υ	Υ	Υ	Υ	Υ	R	R	R	R	DW	DW	——
PHASE 3	R	R	R	R	R	ဖ မွ	G	R	R	DW	DW	
3 CHANGE	R	R	R	R	R	Y	Υ	R	R	DW	DW	¹ ♦ ¹
PHASE 4	R	R	R	R	R	R	R	ဇဗ္ဗ	G	DW	DW	
4 CHANGE	R	R	R	R	R	R	R	Y	Υ	DW	DW	т
PHASE 4 ALT	R	R	R	R	R	æ	R	ပာမွာ	G	WK	WK	. ^0
PED COUNTDOWN CLEAR.	R	R	R	R	R	R	R	ဇ မွ်	G	FL/DW	FL/DW	⊣ ДΥ - -
4 ALT CHANGE	R	R	R	R	R	R	R	Y	Y	DW	DW	اة
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	



<u>KEY</u>

A.B) 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

- c) 1 CONDUCTOR (NO. 6 AWG)
 STRANDED COPPER GROUND WIRE
- -D ELECTRICAL CABLE 2 CONDUCTOR, ALUMINUM SHIELDED
- E) 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- F,G VIDEO DETECTION CABLE
- LW LOOP WIRE ENCASED IN FLEXIBLE TUBING NO 14 AWG
- EL EXISTING LOOP WIRE
- EC EXISTING CABLE
- → GROUND ROD

BAI

BRUDIS & ASSOCIATES, INC. CONSULTING ENGINEERS

9220 RUMSEY ROAD SUITE 110 COLUMBIA, MARYLAND 21045

2 TEDD REDLINE #2 FEBRUARY 2008



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 2 AT THE ENTRANCE TO M.V.A.

	GENE	RAL I	NFORMATI	ON	SHI	EET	•
SCALE_	N.T.S.	DATE	06/11/07	CONT	RACT	NO	AT93651

DESIGNED BY MWS ANNE ARUNDEL 0200239.10 LOGMILE CHECKED BY ___RJM T.I.M.S. NO. 1043 F.A.P. NO._ TOD NO._

DRAWING NO. TS-530D SHEET NO. 2 OF

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